

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 27 JAN 2006

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Applicant's or agent's file reference RSJ08022WO		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2004/004644		International filing date (day/month/year) 03.11.2004		Priority date (day/month/year) 04.11.2003
International Patent Classification (IPC) or national classification and IPC B42D15/00				
Applicant DE LA RUE INTERNATIONAL LIMITED ET AL.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 2 sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input checked="" type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 27.07.2005		Date of completion of this report 30.01.2006		
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Curt, D Telephone No. +31 70 340-4383		



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/004644

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-15 as originally filed

Claims, Numbers

2-32, 34-40 as originally filed

1, 33 filed with telefax on 20.12.2005

Drawings, Sheets

1/3-3/3 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☒ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☒ the claims, Nos. 1,33
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/004644

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 33-37

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 33-37

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/004644

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3,4,6-11,13-24,26,27,29,30
	No: Claims	1,2,5,12,25,28,31,32,38-40
Inventive step (IS)	Yes: Claims	11-32,38-40
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-32,38-40
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/GB2004/004644

Item I

The following amendments in claim 1 and 33 as filed on 20 December 2005 have not been considered since the amendments go beyond the disclosure in the international application as filed (Article 34(2)).

In claim 1:

- on the same side of the substrate as the first areas (line 4 and 5)
- on the same side of the substrate as the first and second areas (line 15 and 16)

In claim 33:

- on the same side of the substrate

Support for the amendments could not be found in the application or rendered implicit by said application.

Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following document:

D1: US-A-6 089 614 (DRINKWATER KENNETH JOHN ET AL) 18 July 2000 (2000-07-18)

D2: US-B1-6 505 779 (POWER GARY ET AL) 14 January 2003 (2003-01-14)

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

The document D1 discloses (the references in parentheses applying to this document):

A security device provided on a substrate (1) comprising

- one or more printed or transferred first areas, each first area having one or more first colours (see figure 5);
- one or more printed or transferred second areas (11A, 11B, 11C), each second area having one or more second colours, wherein at least one of the first and second areas comprises a discontinuous pattern (see for instance element 11A) , and

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/GB2004/004644

wherein the first area or areas surrounds the second area or areas, each first area being distinguishable from the second area or areas;
wherein the first area(s) and/or second area(s) define an image (7); and,
-a camouflage pattern (10) provided over the image and at least an adjacent region surrounding the image, the camouflage pattern having a colour and pattern (see column 7, lines 60-63 where the patch is a partially metallised surface with has a color and pattern) such that in combination with the first and second areas, it renders the image substantially invisible when viewed under reflected light but visible when viewed in transmission (see for instance column 8, lines 38-43)

2. The dependant claims 2-10 contain features some of which are revealed in the prior art quoted in the search report or which form part of the normal consideration of the man skilled in the art. Therefore the dependant claims do not meet the requirements of the PCT in respect of novelty and/or inventive step.
3. The combination of the features of dependent claim 11 (the elements making up the camouflage pattern and background areas between the elements of the discontinuous pattern are approximatively the same) seems neither known from, nor rendered obvious by, the available prior art.
The problem intended to be solved by the invention seems to be the provision of a camouflage pattern over a security indicia wherein the camouflage pattern has improved hiding properties.
Document D2 shows a a security pattern used to visually conceal an indicia: the security pattern is made out of lines with a spacing approximatively the same as the indicia to be concealed (see column 4, lines 34-41). The security pattern can have a color which contrasts with the security indicia (see column 5, lines 1-5). However, the indicia to be concealed does not have a discontinuous pattern (as in claim 1 of the present application).
Starting from D1 and confronted with the above-mentionned problem, the man skilled in the art would consider D2. By doing so, he would obtain a security device according to claim 10. However, he would not obtain a security device according to claim 11 where: "the elements making up the camouflage pattern and background areas between the elements of the discontinuous pattern are approximatively the same."

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/GB2004/004644

Claim 11 therefore involves an inventive step (Article 33 (3) PCT).

16

CLAIMS

1. A security device provided on a substrate and comprising one or more printed or transferred first areas, each first area having one or more first colours;

5 one or more printed or transferred second areas on the same side of the substrate as the first area(s), each second area having one or more second colours, wherein at least one of the first and second areas comprises a discontinuous pattern, and wherein the first area or areas
10 surrounds the second area or areas, each first area being distinguishable from the second area or areas;

wherein the first area(s) and/or second area(s) define an image; and,

a camouflage pattern provided over the image and at
15 least an adjacent region surrounding the image on the same side of the substrate as the first and second areas, the camouflage pattern having a colour and pattern such that in combination with the first and second areas, it renders the image substantially invisible when viewed under reflected
20 light but visible when viewed in transmission.

2. A device according to claim 1, wherein the discontinuous pattern comprises an array of dots which is either regular or stochastic.

3. A device according to claim 2, wherein the
25 discontinuous pattern comprises a half-tone dot array.

4. A device according to any of the preceding claims, wherein the discontinuous pattern comprises a regular array of similarly sized and shaped dots.

5. A device according to any of the preceding claims,
30 wherein the discontinuous pattern comprises an array of circles, squares, lines, indicia such as alphanumerics, graphical shapes and the like.

6. A device according to any of claims 2 to 5, wherein
35 each dot has a maximum lateral dimension of less than 1.5mm, preferably less than 1mm.

7. A device according to any of the preceding claims, wherein the discontinuous pattern is substantially the same

27. A device according to any of the preceding claims, wherein the area(s) not including the discontinuous pattern exhibit a rainbow colour variation.
28. A device according to any of the preceding claims,
5 wherein the area(s) not including the discontinuous pattern are provided as one of a solid colour or colours or a half-tone.
29. A device according to claim 28, wherein the solid colour area is broken up with one or more fine lines.
- 10 30. A device according to any of the preceding claims, wherein the device is provided on a background with a flat tint such as white.
31. A device according to any of the preceding claims, wherein the image comprises one or more geometric figures,
15 alphanumeric characters and graphical designs.
32. A device according to any of the preceding claims, wherein the device is provided on a paper or polymer substrate.
33. A security device provided on a substrate and
20 comprising one or more printed or transferred first areas; one or more printed or transferred second areas, wherein at least one of the first and second areas defines a discontinuous pattern, and wherein the first area or areas surrounds the second area or areas, wherein the areas are
25 formed from one or more reflective media on the same side of the substrate, and wherein the form of the discontinuous pattern and the other area(s) are chosen such that the image is not visible under reflected light but is visible when viewed in transmission.
- 30 34. A device according to claim 33, wherein the first and second areas are embossed or overprinted with an image.
35. A device according to claim 33 or claim 34, wherein the discontinuous pattern is a printed metallic ink.
- 35 36. A device according to claim 33 or claim 34, wherein the discontinuous pattern is a printed OVI or other colour shifting ink.
37. A device according to any of claims 33 to 36, wherein the first and second areas are printed metallic inks.